

Results-based Plan Briefing Book 2011-12

Ministry of the Environment

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MINISTRY OVERVIEW

VISION

An Ontario with clean and safe air, land and water that contributes to healthy communities and a strong economy.

MISSION

Work with Ontarians to achieve environmental sustainability and support public health.

MINISTRY OVERVIEW STATEMENT

Environmental protection is key to a sustainable society. Our environmental health is necessary for economic, ecological and human health, and to develop a sustainable economy.

The Ministry of the Environment (MOE) provides comprehensive environmental protection built on a strong foundation of clear laws, stringent regulations and standards, and science-based permits and approvals. Through this protection, the ministry is supporting the government's key priorities of "Environment", "Health" and, "Economy" by achieving results in combating climate change, reducing toxics, and protecting water and natural areas while also supporting innovation and helping to grow a sustainable economy.

The ministry monitors and analyzes environmental trends to determine the effectiveness of its activities and assess risks to human health and the environment. This information enables the ministry to develop and implement effective legislation, regulations, standards, policies, guidelines and programs that protect public health and the environment.

MOE works with all Ontarians to protect and restore the environment to enhance environmental quality, support public health and lay a green foundation for sustainability by:

- Developing protective policies, legislation, regulations and standards.
- Using science and research to support policy development, environmental solutions and reporting.
- Ensuring that planning, which aims to identify and evaluate environmental benefits and risks, takes place at the earliest stages in the decision making process.
- Undertaking compliance and enforcement action to ensure consistency with environmental laws.
- Working collaboratively with other governments, Aboriginal groups and organizations, industry, stakeholders and the public.
- Monitoring and reporting to track environmental progress over time and inform the public.
- Modernizing environmental approval processes.

The Ministry of the Environment continues to protect and improve the quality of the environment, to support environmental sustainability, human health and safety, and Ontario's economic prosperity.

MINISTRY ACTIVITIES

The following key strategies support the ministry's priority of safeguarding our environment by working to ensure cleaner air, water, land, and healthier ecosystems for the people of Ontario.

Combating Climate Change and Protecting Ontario's Air

The ministry continues to invest in the delivery of Ontario's Climate Change Action Plan and in protecting the air we breathe. Initiatives include:

- Working on climate change strategies, policies and research to meet Ontario's aggressive and achievable targets to reduce greenhouse gas emissions by:
 - Continuing to work with our Canadian and U.S. partners on a common regional approach to reduce greenhouse gases and support transition to a low-carbon economy.
 - Providing a single renewable energy approval to encourage more renewable energy projects like wind and solar.
 - Continuing to establish long-term monitoring stations in the Hudson Bay Lowlands to monitor the effects of climate change in this region.
- The Ministry of the Environment received excellent advice from the Expert Panel on Climate Change Adaptation. In response to this advice, MOE has been working with partner ministries to develop Climate Ready: Ontario's Adaptation Strategy and Action Plan. This Strategy and Action Plan creates a vision and framework that will help Ontario adapt and minimize impacts of climate change. This includes coordinating and participating in the Ontario Regional Adaptation Collaborative to advance community level adaptation planning and actions to reduce vulnerability to climate change impacts.
- Improving the overall air quality in Ontario by:
 - Addressing smog and air toxics through reduced emissions in Ontario.
 - Working with the Canadian government to seek reductions in U.S. emissions that result in smog (nitrogen oxides (NO_x), sulphur dioxide (SO₂), volatile organic compounds (VOCs)) and transboundary impacts.
 - Reducing vehicle emissions of smog-causing pollutants through the Drive Clean program.

Reducing Toxics in the Environment

The ministry is taking action on toxic substances to protect the health of Ontarians and the environment while supporting the development of Ontario's green economy by:

- Implementing the *Toxics Reduction Act* to reduce pollution and protect Ontarians from exposure to toxic substances in air, water, land and consumer products.

- Continuing to reduce human exposure to toxics through the ban on the sale and use of cosmetic pesticides and fostering the development and sale of green alternatives.

Protecting Ontario's Water

The ministry continues to work to protect both our drinking water and our fresh water resources from pollution. MOE is supporting the government's water strategy to make Ontario the North American leader in water protection and innovation, and to sustain Ontario's water resources for future generations. Key initiatives include:

- Implementing the new *Water Opportunities Act* to drive innovation in water technologies and approaches, create economic opportunities, sustain water infrastructure and protect Ontario's water.
- Continuing to implement source protection planning to help reduce drinking water risks by addressing threats to drinking water quantity and quality.
- Continuing to implement the Lead Action Plan to ensure the protection of public health.
- Protecting Great Lakes sustainability by implementing the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem.
- Implementing the Lake Simcoe Protection Plan to help restore and protect the health of Lake Simcoe.
- Informing the public about the state of Ontario's water through the release of the Chief Drinking Water Inspector's Annual Report, the Minister's Annual Drinking Water Report, and the report on Water Quality in Ontario.

Waste Diversion and Land Quality

The ministry's waste diversion initiatives build on efforts to put Ontario at the forefront of a green economy in North America. MOE is continuing to take action to promote and increase waste diversion while ensuring that residual wastes are appropriately managed by:

- Helping Ontarians divert more waste from our landfills and waterways through legislation, policies, programs, and standards to promote reduction, reuse, and recycling of non-hazardous wastes.
- Continuing to look at improvements to Ontario's waste diversion framework based on feedback received from the *Waste Diversion Act* review and Municipal Hazardous or Special Waste (MHSW) Program review.
- Providing ongoing direction and guidance to Waste Diversion Ontario in their oversight of waste diversion programs.
- Maximizing waste diversion at industrial, commercial and institutional facilities
- Ensuring compliance with legislation and promoting appropriate management of hazardous wastes and non-hazardous wastes.

- Implementing Brownfields legislative and regulatory requirements to ensure the proper cleanup and redevelopment of brownfield sites while protecting the environment.

Open For Business: Modernization of Approvals

Modernizing the environmental approvals process is a key part of the government's Open for Business initiative. This initiative aims to create faster, smarter government-to-business services while protecting the public interest. The ministry is transforming the environmental approvals process by creating a more efficient, user-friendly approach that remains fully protective of the environment. The new model would also support the economic competitiveness in Ontario and improve client services.

Effective Monitoring, Compliance and Enforcement

The ministry's research, monitoring, inspection, investigations and enforcement activities are integral to achieving Ontario's environmental goals. The ministry will continue to support these activities by:

- Enhancing inspection and enforcement capacity to protect Ontario's air, land and water.
- Maintaining MOE's laboratory and monitoring facility and equipment which is critical for water, air and soil sample analysis, monitoring, reporting and developing environmental standards.
- Working with industry, stakeholders, and the public to achieve compliance with environmental standards.

Ministry Administration

Ministry Administration provides strategic support for fiscal controllership, human resources and strategic management oversight, including financial management, audits, technology operations, addressing requests under the *Freedom of Information Act*, legal services, communications, and French Language Services. It also includes the Environmental Bill of Rights Registry which enhances citizen participation in government decisions and provides substantive information to the public on environmental initiatives.

Greening Internal Operations

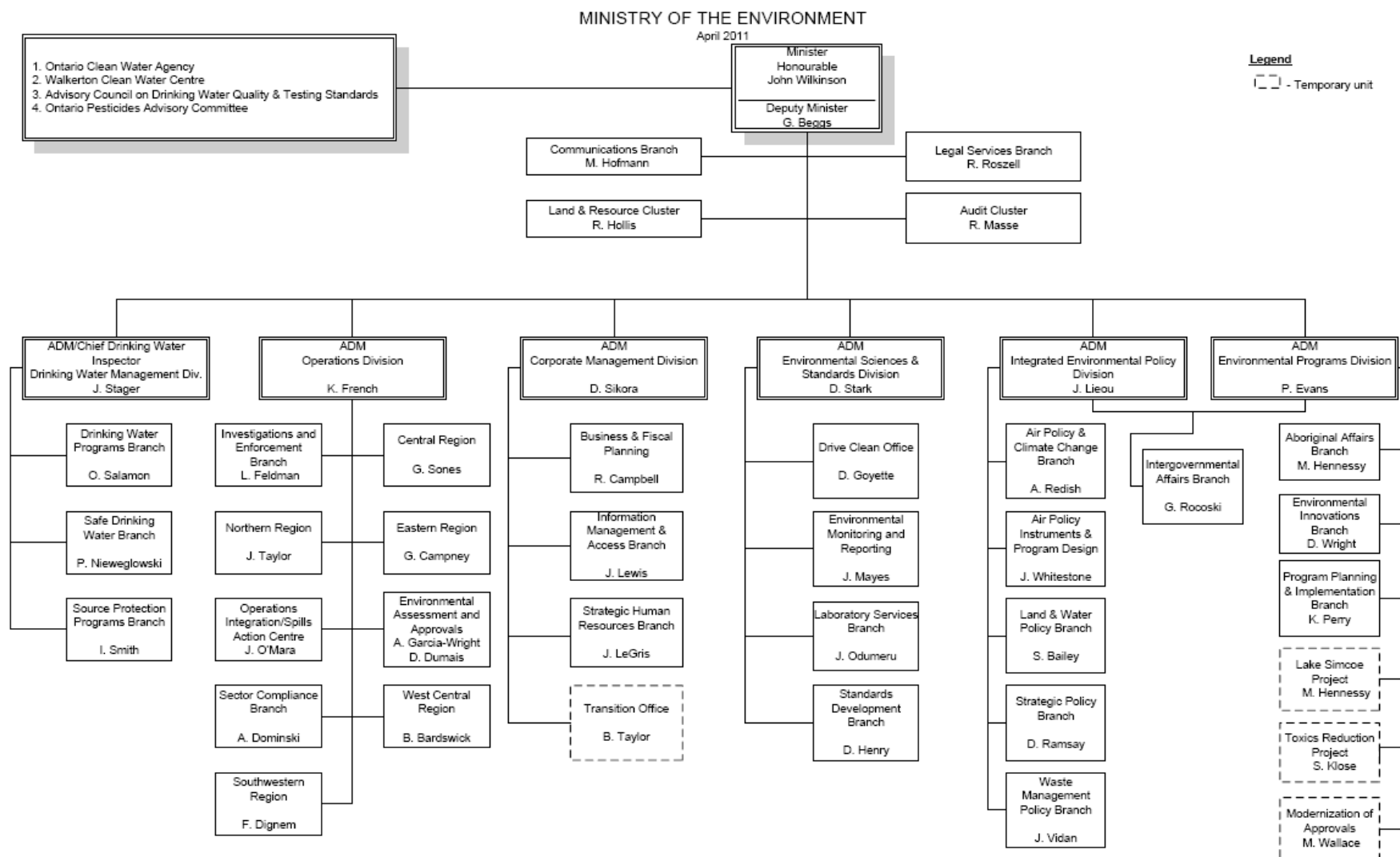
The ministry will continue to take a leadership role to conserve energy and wisely use our air, water and land resources in order to generate sustainable environmental, health, and economic benefits for present and future generations.

MOE continues to reduce its environmental footprint by greening its internal operations and supporting environmentally sustainable practices for its partners, stakeholders, and suppliers. A range of activities are being undertaken to reduce the ministry's air emissions, energy use, water consumption, and waste generation. These include: monitoring and reducing the ministry's carbon footprint, promoting energy and water conservation in ministry outreach and educational activities, and supporting government-wide greening and sustainability initiatives.

MINISTRY KEY RESULTS

By delivering on these government priorities, the ministry strives to achieve these key results:

- Delivering on Ontario's Climate Change Action Plan.
- Supporting Open Ontario initiatives, including implementing the *Water Opportunities Act*.
- Safeguarding drinking water from source to tap.
- Protecting our water resources, including Lake Simcoe and the Great Lakes Basin Ecosystem.
- Reducing toxic substances and cancer-causing agents in the environment.
- Maximizing waste diversion.
- Cleaning up environmentally contaminated sites.
- Enhancing inspection and enforcement capacity.
- Investing in environmental science.
- Modernizing approvals and reducing regulatory burden.
- Streamlining renewable energy approvals.
- Supporting Ontario's transformation to a green economy.



LEGISLATION ADMINISTERED BY THE MINISTRY OF THE ENVIRONMENT

Adams Mine Lake Act, 2004

Capital Investment Plan Act, 1993 (Part IV re: Ontario Clean Water Agency only)

Clean Water Act, 2006

Consolidated Hearings Act

Environmental Assessment Act

Environmental Bill of Rights, 1993

Environmental Protection Act

Lake Simcoe Protection Act, 2008

Ministry of the Environment Act

Municipal Water and Sewage Transfer Act, 1997

Nutrient Management Act, 2002 (together with the Ministry of Agriculture, Food and Rural Affairs)

Ontario Water Resources Act

Pesticides Act

Safe Drinking Water Act, 2002

Sustainable Water and Sewage Systems Act, 2002

Toxics Reduction Act, 2009

Waste Diversion Act, 2002

Water Opportunities Act, 2010 (except for Part II)¹

¹ The MOE administers this Act except for Part II, however, an Order In Council making this official has yet to go forward.

AGENCIES, BOARDS & COMMITTEES (ABCs)

| | ESTIMATES 2011-12 \$ | INTERIM ACTUALS 2010-11 \$ | ACTUALS 2009-10 \$ |
|------------------------------------------------------------------|----------------------------|----------------------------------|--------------------------|
| Advisory Council on Drinking Water Quality and Testing Standards | 200,000 | 194,702 | 202,398 |
| Lake Simcoe Science & Coordinating Committees | 35,000 | 20,393 | 20,061 |
| Ontario Pesticides Advisory Committee | 125,000 | 98,667 | 149,043 |
| Total Agencies, Boards & Committees (ABCs) | 360,000 | 313,763 | 371,502 |

NOTE: The ministry contributed operating funding to the Walkerton Clean Water Centre in 2010-11. Detailed financial information for Ontario Clean Water Agency and Walkerton Clean Water Centre is provided in their Business Plans.

MINISTRY PLANNED EXPENDITURE 2011/12

| | ESTIMATES 2011-12 \$ |
|-----------------------|----------------------------|
| Operating | 355,627,914 |
| Capital | 26,943,400 |
| Total Ministry | 382,571,314 |

MINISTRY PLANNED EXPENDITURE 2011/12

| VOTE/PROGRAMS | ESTIMATES 2011-12 \$ |
|--------------------------------------|----------------------------|
| MINISTRY ADMINISTRATION | |
| Strategic Management Support | 53,724,400 |
| Ministry Administration Capital | 1,000 |
| Ministry Administration Total | 53,725,400 |
| AIR | |
| Smog and Air Toxics Reduction | 46,334,300 |
| Drive Clean | 18,991,100 |
| Climate Change | 20,301,000 |
| Air Capital | 300,000 |
| Air Total | 85,926,400 |
| WATER | |
| Clean Water | 104,319,900 |
| Source Protection | 52,298,700 |
| Nutrient Management | 8,255,400 |
| Water Capital | 7,569,300 |
| Water Total | 172,443,300 |
| WASTE | |
| Non-Hazardous Waste Management | 16,888,600 |
| Hazardous Waste Management | 24,577,200 |
| Land Restoration | 9,871,300 |
| Waste Capital | 18,676,000 |
| Waste Total | 70,013,100 |
| STATUTORY APPROPRIATIONS | 463,114 |
| Total Ministry | 382,571,314 |

APPENDIX:

ANNUAL REPORT 2010/11

2010/11 ANNUAL REPORT

During 2010/11, the Ministry of the Environment undertook many initiatives and activities to protect and enhance the quality of air, land, and water in Ontario. These efforts contribute to healthy communities, ecological protection and sustainable development today and for the benefit of future generations.

COMBATING CLIMATE CHANGE AND PROTECTING ONTARIO'S AIR

A number of ministry activities in 2010/11 were aimed at reducing the sources and effects of global climate change and helping to protect Ontarians from the harmful effects of air pollutants.

The effectiveness of ministry initiatives was highlighted with the February 2011 release of the 2009 Air Quality Report, which shows that emissions of common air pollutants are decreasing. The report points to several Ontario initiatives that are contributing to improvements in the quality of our air, including:

- Moving away from dirty, coal-fired power generation and using cleaner energy sources;
- Introducing 59 new or updated air standards since 2005 – the biggest change in air standards in 30 years;
- Reducing smog-causing emissions from cars and trucks through Drive Clean testing; and,
- Setting tough limits for nitrogen oxide and sulphur dioxide – two major smog-causing pollutants.

Ontario understands that progress in combating climate change and protecting and enhancing air quality requires cooperation and collaboration by many jurisdictions and organizations. This is why the province continues to work with:

- Our Canadian and U.S. partners on a common regional approach to reduce greenhouse gases and support transition to a low-carbon economy; and,
- Other provinces through the Council of the Federation to address climate change.

The province launched the fourth round of Community Go Green funding, providing \$1.4 million to support 33 local greenhouse gas reduction projects across Ontario. Every project is tailored to local needs to help residents switch to a lower carbon lifestyle and fight climate change.

On January 7, 2011, Ontario, along with provincial and federal partners, announced funding of the Ontario Regional Adaptation Collaborative, a series of projects to help communities adapt to climate change. Projects include helping communities measure their vulnerability to extreme weather events and integrate climate change considerations into all areas of managing water resources.

The ministry has established the second carbon flux monitoring station in the Hudson Bay Lowlands. The new station is on the Attawapiskat River and was opened in July 2010; the first station was built in 2009 at Kinoje Lake. These monitoring stations measure the exchange of carbon, water, and energy over peatland ecosystems to help address knowledge gaps; improve our understanding of carbon cycling in Ontario's Far North, the role of the Hudson Bay Lowlands in our climate system, and how climate change may be affecting this globally significant carbon store.

The ministry is now accepting and reviewing applications under the streamlined Renewable Energy Approvals process for clean energy projects. The Renewable Energy Approval ensures human health and the environment is protected while Ontario increases renewable energy to create green jobs and improve air quality.

REDUCING TOXICS IN THE ENVIRONMENT

The ministry continues to take an innovative approach to protecting Ontarians from toxic substances.

The *Toxics Reduction Act*, the core of Ontario's toxics reduction strategy, requires companies to track, quantify and report the amount of toxics they use, create and release. The act requires companies to develop plans to reduce their use of toxics, including carcinogens.

To this end, Ontario invested \$13.6 million in Green Centre Canada, a green technology consortium which connects green chemistry discoveries in Ontario universities to companies in order to develop alternatives to toxic chemicals and get them to the marketplace faster.

In March 2010, the ministry provided funding to the Canadian Manufacturers and Exporters and Ontario Centre for Environmental Technology Advancement to develop and deliver a 'Cleaner and Greener Manufacturing' training and assistance program for industry.

On August 16, 2010, the Ontario Green Chemistry and Engineering Awards sponsored by the Ministry of the Environment were held. Woodbridge Foam Corporation and the University of Western Ontario's Leo W. M. Lau are the first recipients of the awards.

The ministry and five conservation authorities completed a monitoring study to assess pesticide concentrations in 10 urban streams before and after the implementation of the cosmetic pesticides ban. Tests show about an 80 per cent decrease in concentrations of three pesticides commonly used in lawn care products.

PROTECTING ONTARIO'S WATER

In 2010-2011, the ministry continued to take strong action to protect Ontario's drinking water from source to tap.

The *Water Opportunities and Water Conservation Act* was passed by the Legislature in November 2010. The act builds on Ontario's expertise in water protection services and technology by positioning Ontario to be a North American leader in the growing water technology sector, encouraging Ontarians to use water more efficiently and strengthening sustainable municipal water infrastructure planning by helping municipalities identify and plan for long term infrastructure needs.

The new act sets the framework for developing water technologies and services to make Ontario's expertise available to the world. It encourages Ontarians to use water more efficiently by creating and implementing innovative approaches to protect our most valuable resource. And the act strengthens sustainable municipal water planning by helping municipalities identify and plan for long-term infrastructure needs.

Wheatley Harbour on Lake Erie was removed from the list of Great Lakes Areas of Concern. The revitalized harbour is now home to an abundant and diverse community of fish and wildlife, and water quality has improved.

In July, the government launched a new strategy to reduce phosphorus levels in Lake Simcoe by almost 40 per cent. The strategy is a key part of the Lake Simcoe Protection Plan. This plan, the first of its kind in Ontario to address environmental protection of a watershed, provides a roadmap to help restore and protect the health of the lake and its watershed.

In March 2011, the Minister of the Environment released the sixth annual report of the province's Chief Drinking Water Inspector. The report shows that Ontario's drinking water continues to be of high quality and well protected. More than 645,000 drinking water quality test results were taken in 2009-10 at drinking water systems – 99.88 per cent of results from municipal residential drinking water systems met Ontario's rigorous health-based standards.

The ministry launched the municipal drinking water licensing program issuing 272 licences to 108 municipalities as of the end of December 2010. The program holds owners of municipal drinking water systems to a high standard for operating and managing their systems and incorporates the first quality-management system of its kind in North America.

The permanent facility for the Walkerton Clean Water Centre officially opened in Walkerton, increasing the Centre's capacity to offer courses and hands-on training for drinking water system operators and conduct research on drinking water.

The ministry continues to work with the source protection committees that are responsible for 38 planning areas across the province. The committees have identified risks to their drinking water sources through assessment reports they submitted to the government for approval. The assessment reports will guide the development of source protection plans. Once plans are in place, over 80 per cent of Ontario's population will have its water supplies safeguarded by the source protection process.

In January, \$7 million was invested as part of the Ontario Drinking Water Stewardship Program. This program helps property owners, farmers and small businesses who are near municipal drinking water intakes and wells protect municipal drinking water sources.

EFFECTIVE MONITORING, COMPLIANCE AND ENFORCEMENT

The ministry's drinking water and specialized laboratory inspectors are dedicated to drinking water safety. Municipal residential drinking water systems are inspected on an annual basis, while licensed labs are inspected a minimum of twice a year.

Compliance is steadily improving – the number of municipal residential drinking water systems scoring 100 per cent on inspections has increased over the past five years. Eighty-four per cent of systems had a score over 95 per cent – up from 72 per cent five years ago.

The ministry continues to complete risk-based proactive and responsive inspections for the Non-Hazardous and Hazardous Waste Programs. These inspections address emerging issues in the regulated community where non-compliance is dealt with directly through abatement activities and enforcement.

The ministry operates and maintains 40 Air Quality Index (AQI) reporting stations in Ontario. The data from these stations is used to produce an annual Air Quality in Ontario Report, the latest of which was released on January 14, 2011 and included data from 2009. Key findings were that overall, air quality has improved significantly over the years, especially for nitrogen dioxide (NO₂), carbon monoxide (CO), sulphur dioxide (SO₂), and fine particular matter (PM_{2.5}) – pollutants emitted by vehicles and industry. Emissions of nitrogen oxides (NO_x), CO and SO₂ continue to decrease due in part to Ontario's air quality initiatives, such as the phase-out of coal-fired generating stations, emissions trading regulations (O. Reg. 397/01 and O. Reg. 194/05), emissions controls at Ontario smelters, and Drive Clean emissions testing, which supports the federal vehicle emission standards and technologies, and lower sulphur content in transportation fuels.

The ministry monitors water quality in the Great Lakes, inland lakes, rivers, streams, and groundwater across the province. Every year, the ministry collects and analyzes tens of thousands of samples from water, sediment, and aquatic life such as fish and algae. This extensive monitoring helps us to understand the state of our water resources, the impacts of our activities, the causes of problems and to identify emerging problems. The results of our monitoring show the success of actions taken to date. For example, phosphorus loading rates into Lake Simcoe have decreased. This has contributed to increases in dissolved oxygen concentrations in the deep waters of the lake. In the first year of Ontario's cosmetic pesticides ban, levels of three common lawn care pesticides decreased about 80 per cent in urban streams. In addition, pesticide levels have decreased substantially in our treated drinking water from 1986 to 2006.

On March 16, 2011 the ministry released the *2011-2012 Guide to Eating Ontario Sport Fish* to the public. This 26th edition of the Guide continues to provide advice to the public on safe

levels of consumption of sport fish at over 1950 locations across Ontario. Levels of contaminants such as mercury, PCBs and dioxins/furans have declined since the program began in the 1970s, easing consumption restrictions for many locations and species. Levels of PCBs, mercury, and dioxins and furans are generally stable or declining in our Great Lakes.

Compliance activities are also conducted by general inspectors across the province, with a focus on local facilities and issues across various media (e.g. air, hazardous and non-hazardous waste, municipal and industrial sewage, pesticides, permits-to-take water and agricultural programs). In addition, a central group of sector-based inspectors focus on specific sectors, which includes a dedicated focus to the Industrial, Commercial and Institutional Waste sector, as well as vehicle emissions and other priority sectors.

The ministry focuses its inspection efforts where the highest potential risk exists, based on an analysis of potential impacts to human and environmental health, as well as compliance history (e.g. response to previous violations, complaints, incidents or spills).

Ministry inspectors use a wide variety of compliance and enforcement tools, ranging from education and voluntary action plans to mandatory measures such as tickets, orders and penalties. As of December 2010, 53 Environmental Penalties (EPs) have been issued since 2007, totalling over \$600,000. Money collected for EPs are used to fund local community environmental projects.

Non-compliance may warrant additional follow-up and further measures including charges and potential prosecution of offences under the ministry's legislation. These serve as a strong deterrence to environmental polluters. In the 2009/2010 fiscal year, the ministry laid 1,626 charges (946 charges with convictions) with court assessed fines over \$4.0 M.

The ministry releases information annually about contaminants discharged into water and emitted to the air by posting the Environmental Compliance Report (ECR) on the ministry's public web site. The ministry posted the *2009 Environmental Compliance Report* on the website on December 23, 2010.

WASTE DIVERSION AND LAND QUALITY

Ontario continues to build on its excellent record in diverting waste and protecting the quality of land across the province. Provincial efforts to increase waste diversion are working – Ontarians are keeping more and more compost and recyclables out of our landfills every year.

About five million households in Ontario have access to recycling through the Blue Box program, and more than 870,000 tonnes of waste are being diverted from landfill annually.

Among the highlights for 2010/11, one billion wine and spirit bottles have been returned to The Beer Store for recycling and reuse through the Bag it Back program. Another key

accomplishment saw the last of waste shipments to Michigan from Greater Toronto Area municipalities.

Ontarians can now safely recycle 44 electronic devices, such as MP3 players, cameras, telephones, VCR and DVD players and recorders, and radios at more than 500 sites.

PROMOTING SUSTAINABLE GROWTH

The ministry is developing a risk-based approach to environmental approvals that focuses on environmental protection and outcomes while providing enhanced services for business. The new approach ensures we are responsive to the needs of business, taking advantage of current technology and addressing the increasing complexity of approvals today. The new framework will become operational once relevant legislative amendments made as part of the *Open for Business Act, 2010* are proclaimed.

The framework includes a self-registration process for certain routine, less complex, standard process type activities and a coordinated multi-media approvals process for those activities that are truly unique, complex or pose a potentially higher risk to the environment.

The approach incorporates service delivery standards and online tools to support government-to-business interaction for approvals related processes. It also allows the ministry to deliver on public transparency. Information about regulated activities will be available online and searchable by location.

GREENING INTERNAL OPERATIONS

The ministry continues to “walk the talk” and reduce its environmental footprint by continuing to green its operations.

In recognition of its expertise and strong record of accomplishment, the ministry was invited to help advise the federal government on how to incorporate greening and sustainability into the G-8/G-20 summits. Among the results, a waste diversion rate of over 90 per cent was achieved at conference locations in Toronto and all waste from the Huntsville locations was converted into energy.

As part of the Ontario Public Service’s Green Print Strategy, the ministry committed to reduce the use of paper and related devices by 50 per cent.

The ministry is increasing use of web meeting technologies, such as WebEx and Live Meeting, to host meetings, thereby reducing travel and other practices that have an effect on the environment.

The ministry also partnered with the Ontario Realty Corporation to participate in a large-scale green building study led by the National Research Council’s Institute for Research

and Construction. The study is investigating the relationship between the physical work environment, building energy consumption and organizational effectiveness in office buildings.

MINISTRY INTERIM ACTUAL EXPENDITURES 2010/11

| | (\$M) |
|-----------------------------------------------|----------|
| Operating | \$385.2 |
| Capital | \$ 11.3 |
| Staff Strength (as of March 31, 2011): | |
| *Ministry of the Environment | 2,276.34 |
| *Ontario Clean Water Agency | 702.44 |